<u>Amendments to the Specification</u>:

Please amend the paragraph at page 12, line 30, to page 13, line 13, as follows:

The light beam thrown by the point light source (1), which may be a semiconductor laser, a super-luminescent diode or a light diode with a small emitting area, producing light with a wavelength between 780 and 850 nm, hits the polarizing beam-splitting cube (2). The laser beam is polarized so as to be fully reflected by the splitting edge of the cube (facing left in Fig. 2). The beam passes through a rotating wedge (3), which performs its circumference-scanning. The scanning angle is about 0.5°. Further, the beam enters a telescopic system that produces an appropriate magnification (4). Having been reflected by the mirror (5) (a spectral splitting plate) the beam passes through the astigmatism compensator (6) comprising two lenses that may independently turn around the optical axis of the instrument. The further located refraction compensator (7), which is a telescope comprising two lenses (7a and [[7b]] <u>7d</u>), a movable prism (7b) and a spectral beam splitter (7c), controls the focusing of the laser beam. On leaving the instrument, the laser beam enters the patient's

eye, then is focused on the retina by the eye's optical

elements and creates a virtual reference light source on it.

Its light beam, partially scattered by the retina, passes

the optical media of the eye in the opposite direction and

becomes phase-modulated. The phase modulation of the

exiting beam carries information about the total aberrations

of the eye that characterize its optical system. This beam

passes the said optical elements of the instrument in the

opposite direction. However, because the beam thrown back

and diffused by the retina is practically not polarized,

when it passes the polarizing beam splitter (2), one of the

polarization components is reflected from the splitting edge

and enters the telescope (2), which is necessary for

aligning the input pupil with the plane of the lenslet array

(9) of the wavefront sensor (10).

Please amend the abstract on page 24 as follows (these amendments were presented in the Amendment filed on January 15, 2010, but were objected to because the amended abstract did not begin on a separate page):

Abstract

~~The group of inventions is used for a medical clinical practice~~ An aberrometer is provided for automatically measuring a human eye abberation, determining a subjective visual acuity associated with the selection of a best spherocylindrical correction, and investigating the influence of high orders aberrations on the visual acuity ~~and for prognosticating the eye correction results~~. The ~~inventive~~ aberrometer ~~comprises~~ includes a point light source which is projected on the eye retina, ~~and forms a virtual source thereon whose radiation is dispersed scattered back~~ by ~~said~~ the retina, and passes through the eye optical systems acquiring a phase modulation corresponding to the total eye optical aberration. ~~Said~~ The aberrometer also ~~comprises a system for measuring the shape of the radiation wave front coming out from the eye which is embodied in the form of~~ includes a wave front sensor whose output signal is transmitted to a device control system, an aberration compensation system which is

disposed between the human eye <u>and the wave front sensor</u> <s>and</s>

<s>an measuring system</s> and through which <s>the</s> radiation coming

out from the eye and projected on the eye retina <s>of the</s>

<s>virtual source</s> passes<u>,</u> and a test picture projector which

projects the test picture image on the eye retina <u>through</u>

<u>the aberration compensation system</u>. <s>In the particular</s>

<s>embodiments, said aberrometer is provided with an additional</s>

<s>adjusting, self-calibrating and self-testing system, wherein</s>

<s>the aberrometer control system can be complemented with a</s>

<s>microprocessor controller. The inventive method for setting</s>

<s>the aberrometer consists in establishing a required distance</s>

<s>between the device and a patient eye by illuminating the</s>

<s>eye, in projecting a mark picture on the iris thereof and in</s>

<s>visually observing the relative positions of the projected</s>

<s>mark pictures and the three-dimensional displacement of the</s>

<s>device and/or the eye with respect thereto</s>